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Short Communication

A record of a non-fatal attack of an American crocodile (*Crocodylus acutus*) in the "Rio Segovia" on the Honduras-Nicaragua border

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Abstract

A case of a non-fatal crocodile attack on a human was reported on the banks of the Segovia River on the Honduras and Nicaragua border. The 12-year-old girl survived the attack, only with damage to the tibia of her right leg, where she lost part of the muscle tissue due to the bite. It was after the attack that the American crocodile was shot and killed by local people. In this paper, we discuss the possible causes of crocodile attacks.

Key words: Bite, Central America, Crocodylia, human-crocodile conflict, stroke

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Crocodylus acutus is the only species of crocodile distributed in Honduras and is listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora, or CITES (Rainwater et al. 2022; UNEP-WCMC 2023). Their presence in the country occurs mainly on the Pacific and Atlantic coasts, including islands; also, there are some records in the central-western and central-eastern areas (McCranie 2018; Cubas-Rodriguez and Cupul-Magaña 2023; Cubas-Rodriguez et al. 2023b). The American crocodile lives in swamps, rivers, and lagoons in dry areas and tropical forests from sea level to elevations of 650 m (McCranie 2018; Cubas-Rodriguez et al. 2023a). It is adapted to live in fresh or hypersaline water (King et al. 1990; Escobedo-Galván and Mejía-Vargas 2003; Caballero 2011).

During recent years, multiple interactions with humans have been documented, mostly related to hunting for their skins, for human consumption, or for fear of its terrifying image. The latter is probably related to events or negative experiences that involve crocodiles attacking people (Cupul-Magaña et al. 2010; Pooley et al. 2021). To date, crocodile attacks on people have been documented in Central America, among which about 56 events (five fatal) occurred in Costa Rica (Porras Murillo and Cambronero 2020; Pooley et al. 2021). Panama with approximately 18 cases, with three fatal (Pooley et al. 2021), Honduras with two available records in the literature (Pooley et al. 2021; Cubas-Rodriguez and Cupul-Magaña 2023), and El Salvador and Nicaragua with two cases

(Pooley et al. 2021). In this work, we describe two events related to interactions between crocodiles and humans that took place on the banks of the Segovia River in the Department of Olancho on the Honduras-Nicaragua border.

The attack on a 12-year-old girl occurred on September 24, 2023 (14.3873, -85.2070; 149 m elevation) on the banks of the Segovia River, carrying out the activity of washing clothes. When she went in to drink water, she did not notice the presence of a crocodile (they are common in this area). When a couple passed by, people near the place where the victim was found reported that the crocodile, approximately 2 m long, approached silently, taking the victim's tibia of the right leg by surprise. At that moment, the girl reacted and began to run, which caused part of the flesh on the calf to be detached from her leg. Throughout a couple of minutes, some gunshots were heard coming from the place where the victim was. At that moment, we realized that the crocodile was killed (Fig. 1) by the residents of the area.

This type of conflict between crocodiles and humans in Honduras has not been fully documented; however, there are some records available in the literature. For example, Cubas-Rodriguez and Cupul-Magaña (2023) recorded the death of a crocodile for feeding on cattle that drank water on the banks of the river. There is also another one given by Cubas-Rodriguez et al. (2023b), where they mention the death of a *Caiman crocodilus* due to being run over on the road (Fig. 2). Other data that mentions people hunting crocodiles can be found in some media outlets in the country (Pooley et al. 2021).

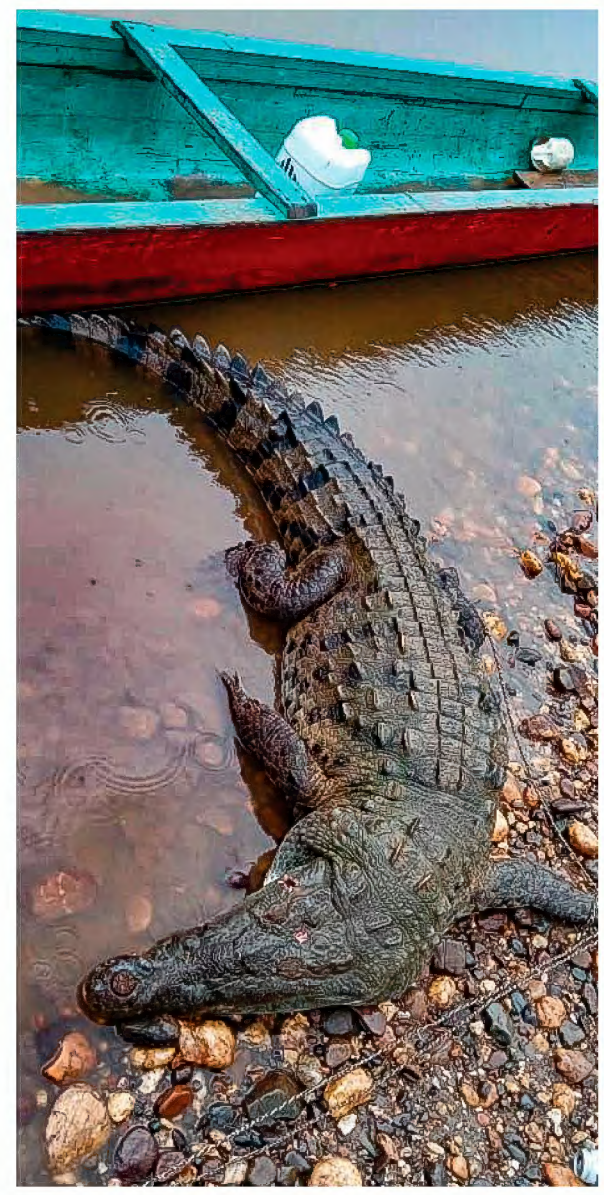

Figure 1. An American crocodile (*Crocodylus acutus*) hunted by people after a non-lethal interaction with a young girl at the Segovia River on the Honduras and Nicaragua border.

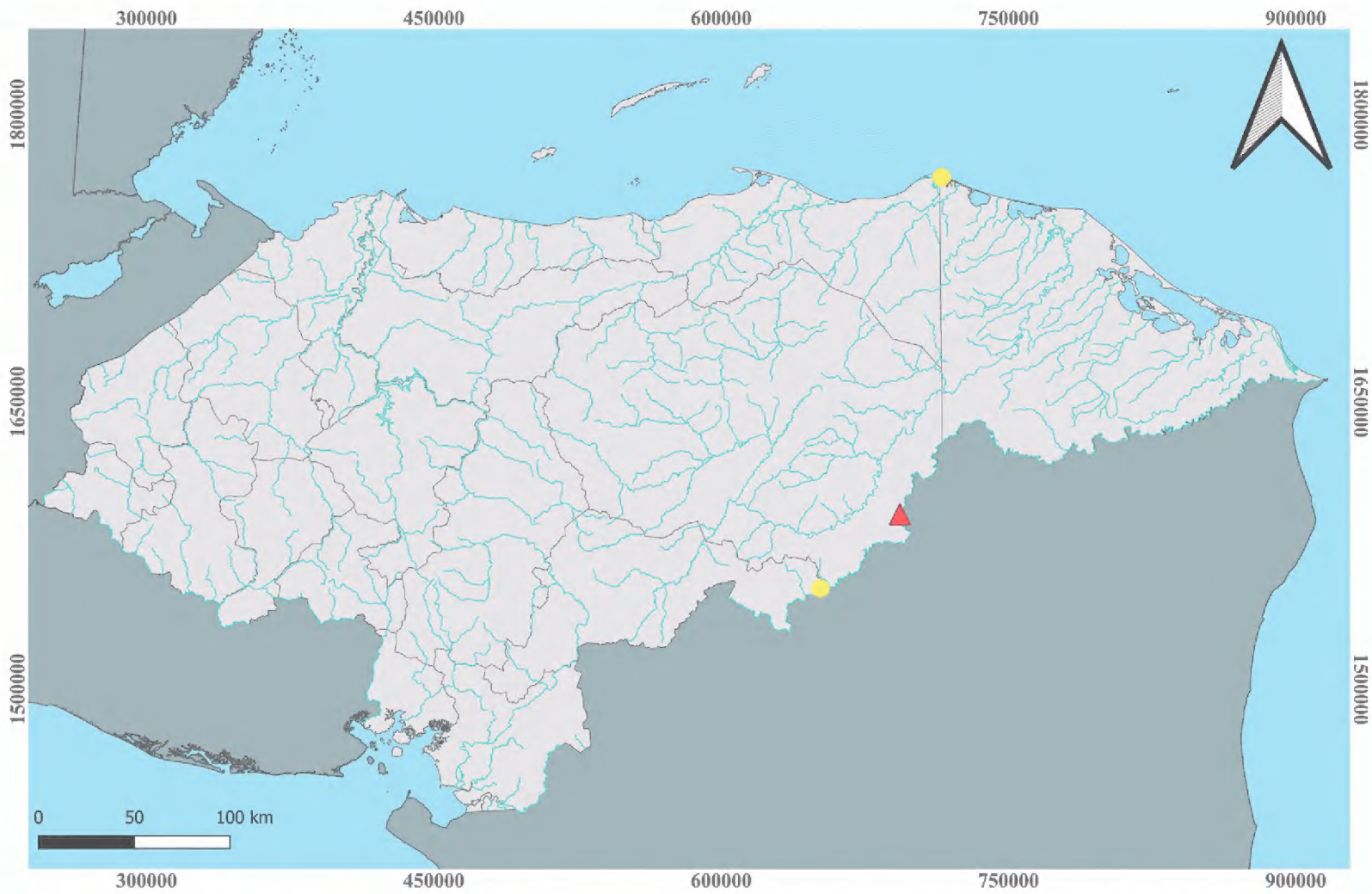

Figure 2. Previous records of interaction between crocodiles and caimanes with humans in Honduras (yellow circle); new record of interaction between crocodiles and humans (red triangle). A map developed in the UTM coordinate system in zone 16N.

In the literature, there are many records that mention that these events usually occur frequently in or on the shores of the water, in places with restricted access or risk areas due to the presence of crocodiles, and that they could be related to the increased population of reptiles, destruction of the habitat, and growth of the urban fence in areas surrounding where these imposing crocodiles rest (Pooley et al. 2021). That said, attacks by crocodiles and alligators in Honduras on humans are still considered to have a very low frequency, as there is only one event documented in the literature.

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Additional information

Conflict of interest

The authors have declared that no competing interests exist.

Ethical statement

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Author contributions

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Data availability

All of the data that support the findings of this study are available in the main text.

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